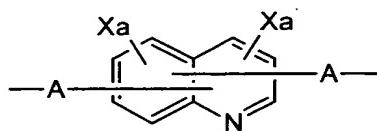


Claims

1. A quinoline copolymer comprising a quinoline monomer unit and a benzotriazole monomer unit.

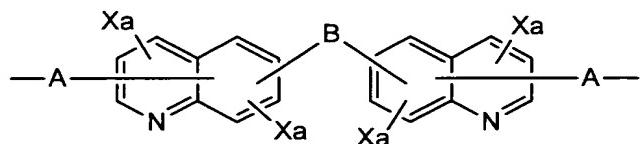
2. The quinoline copolymer according to Claim 1, wherein it is a 5 copolymer comprising

a quinoline monomer unit represented by Formulae (I):



or

(I)



10 (in the formulae, each X is independently a substituent selected from the group consisting of R¹, -OR², -SR³, -OCOR⁴, -COOR⁵, and -SiR⁶R⁷R⁸ (here, R¹ to R⁸ are independently a C1 to C22 straight-chain, cyclic, or branched alkyl group, or a C2 to C20 aryl or heteroaryl group), the substituents may be identical to or different from each other and are bonded to substitutable 15 positions of the quinoline residue, and each a is independently an integer of 0 to 3; each A is a group selected from the group consisting of a single bond and an arylene group; and B is a divalent linking group selected from the group consisting of a single bond, -O-, -S-, -C(O)-, -S(O)-, -S(O₂)-, -W-, $-(-O-W)_m-O-$ (m is an integer of 1 to 3), and -Q- (W is a divalent group selected from the 20 group consisting of -Ra-, -Ar'-, -Ra-Ar'-, -Ra'-O-Ra'-, -Ra'-C(O)O-Ra'-, -Ra'-NHCO-Ra'-, -Ra-C(O)-Ra-, -Ar'-C(O)-Ar'-, -Het'-, -Ar'-S-Ar'-, -Ar'-S(O)-Ar'-,

-Ar'-S(O₂)-Ar'-, and -Ar'-Q-Ar'-, Ra is an alkylene group, Ar' is an arylene group, each Ra' is independently a group selected from the group consisting of an alkylene group, an arylene group, and a mixed alkylene/arylene group, Het' is a heteroarylene group, and Q is a divalent group containing a quaternary carbon)) and

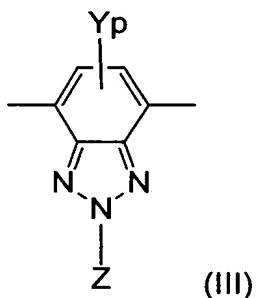
an optionally substituted benzotriazole monomer unit, and
a group linking the monomer units is represented by Formula (II):

-(D) b- (II)

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(in the formula, D is a divalent group selected from the group consisting of -O-, -S-, -NR-, -CR₂-, -SiR₂-, -SiR₂-O-SiR₂-, and -SiR₂-O-SiR₂-O-SiR₂- (here, each R is independently a C1 to C22 straight-chain, cyclic, or branched alkyl group, or a C2 to C20 aryl or heteroaryl group), and b is an integer of 0 to 1).

15 3. The quinoline copolymer according to Claim 2, wherein the optionally substituted benzotriazole monomer unit is represented by Formula (III):



(in the formula, each Y is independently a substituent selected from the group consisting of a halogen atom, -R¹, -OR², -SR³, -OCOR⁴, -COOR⁵, and -SiR⁶R⁷R⁸ (here, R¹ to R⁸ are independently a C1 to C22 straight-chain, cyclic,

or branched alkyl group, or a C2 to C20 aryl or heteroaryl group), the substituents may be identical to or different from each other and are bonded to substitutable positions of the benzene ring of the benzotriazole skeleton, and p is an integer of 0 to 2; in the formula, Z is a group selected from the group consisting of optionally substituted alkyl, aryl, and heteroaryl groups).

4. The quinoline copolymer according to either Claim 2 or 3, wherein X in Formulae (I) is -R¹ (here, each R¹ is independently a C1 to C22 straight-chain, cyclic, or branched alkyl group or a C2 to C20 aryl or heteroaryl group), and each a is independently an integer of 0 to 3.

5. The quinoline copolymer according to any one of Claims 2 to 4, wherein Y in Formula (III) is -R¹ (here, each R¹ is independently a C1 to C22 straight-chain, cyclic, or branched alkyl group or a C2 to C20 aryl or heteroaryl group), p is an integer of 0 to 2, and Z is an optionally substituted phenyl group.

6. An organic electroluminescent device fabricated by employing the quinoline copolymer according to any one of Claims 1 to 5.